General Collection Selfie-Surveying Stacks for Major Projects or General Inquiry

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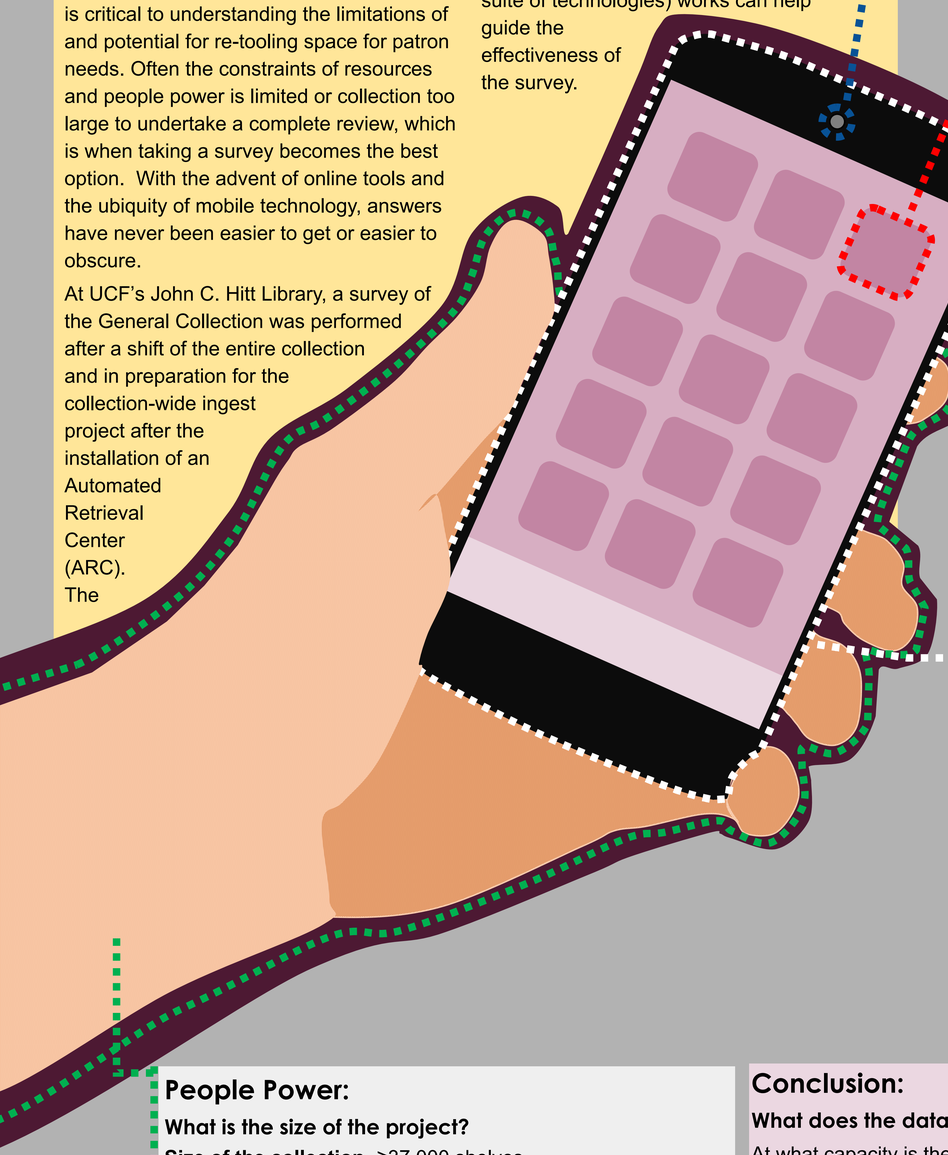
Abstract:

Libraries in the 21st century are under constant pressure to change with the times. Long-term and well-documented trends in circulation numbers double this pressure for the physical spaces of the building, leading to many projects that reallocate space from stacks to study areas. Knowing how stacks space breaks down in linear feet and inches is critical to understanding the limitations of and potential for re-tooling space for patron needs. Often the constraints of resources and people power is limited or collection too large to undertake a complete review, which is when taking a survey becomes the best option. With the advent of online tools and the ubiquity of mobile technology, answers have never been easier to get or easier to obscure.

At UCF's John C. Hitt Library, a survey of the General Collection was performed after a shift of the entire collection and in preparation for the collection-wide ingest project after the installation of an Automated Retrieval Center (ARC). The deployment of new technologies and the benefits they brought to the project, helped to save time and head ache both in the collection of data and its analysis. Without careful consideration, design, and testing, issues that might seem small at the start of the project can compound and impact the timeframe and result of the project. Understanding how the technology (or suite of technologies) works can help guide the effectiveness of the survey.



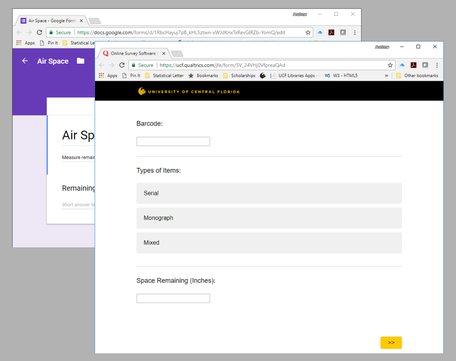
Hardware:

What are the physical resources on-hand?

Access to mobile technology - Smartphones or Laptops with barcode scanners, and Wi-Fi

Mobile Workstations - Book trucks or desks with wheels

Measuring Tools- Low-tech works best: ruler or measuring tape



Apps:

What can you do with the surveying tools you can access?

Paid vs. Free- Google Forms, Survey Monkey, Springshare, Qualtrics Survey, or others

Interface with hardware– Check that surveying tools work with all hardware: laptops, barcode scanners, or smartphones.

Format of Output- Each format information differently, make strategies

Protections from error– Number and value validations corresponding to the tolerances and goals of the project

How will you crunch the numbers and retrieve the data?

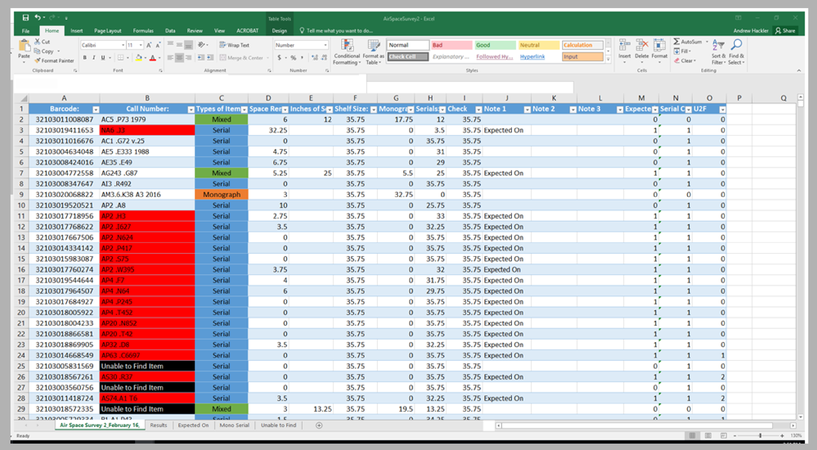
ILS and Review Files- Aleph and Sierra have different capabilities, and may not interface with any tool or software

Internal or External Data Crunchers- Exporting data to a Comma Separated Value (.csv) spreadsheet can give more control

Formulas & Logic- Understanding the grammar and syntax of long formula chains will help create and check analysis.

Reports, Graphs, and Visualization- Turn raw data is unhelpful into easily understandable graphs, charts, and tables can help better communicate the results of the survey.

Formula for Monograph in Inches	=SUM(IF([@[Types of Items:]]="Mixed",SUM(-[@[Space Remaining (Inches):]]-[@[Inches of Serials:]],[@[Shelf Size:]]),0),IF([@[Types of Items:]]="Monograph",SUM(-[@[Space Remaining (Inches):]],[@[Shelf Size:]]),0))



Barcode:	Call Number:	Types of Item	Space Rem	Inches of S	Shelf Size:	Monogr	Serials	Check	Note 1	Note 2	Note 3	Expecte	Serial C	U2F
32103011008087	AC5 .P73 1979	Mixed	6	12	35.75	17.75	12	35.75				0	0	0
32103019411653	NA6 .I3	Serial	32.25		35.75	0	3.5	35.75 Expected On				1	1	0
32103011016676	AC1 .G72 v.25	Serial	0		35.75	0	35.75	35.75				0	1	0
32103004634048	AE5 .E333 1988	Serial	4.75		35.75	0	31	35.75				0	1	0
32103008424016	AE35 .E49	Serial	6.75		35.75	0	29	35.75				0	1	0
32103004772558	AG243 .G87	Mixed	5.25	25	35.75	5.5	25	35.75 Expected On				1	1	0
32103008347647	AI3 .R492	Serial	0		35.75	0	35.75	35.75				0	1	0
32103020068822	AM3.6.K38 A3 2016	Monograph	3		35.75	32.75	0	35.75				0	0	0
32103019520521	AP2 .A8	Serial	10		35.75	0	25.75	35.75				0	1	0
32103017718956	AP2 .H3	Serial	2.75		35.75	0	33	35.75 Expected On				1	1	0
32103017768622	AP2 .I627	Serial	3.5		35.75	0	32.25	35.75 Expected On				1	1	0
32103017667506	AP2 .N624	Serial	0		35.75	0	35.75	35.75 Expected On				1	1	0
32103014334142	AP2 .P417	Serial	0		35.75	0	35.75	35.75 Expected On				1	1	0
32103015983087	AP2 .S75	Serial	0		35.75	0	35.75	35.75 Expected On				1	1	0
32103017760274	AP2 .W395	Serial	3.75		35.75	0	32	35.75 Expected On				1	1	0
32103019544644	AP4 .F7	Serial	4		35.75	0	31.75	35.75 Expected On				1	1	0
32103017964507	AP4 .N64	Serial	6		35.75	0	29.75	35.75 Expected On				1	1	0
32103017684927	AP4 .P245	Serial	0		35.75	0	35.75	35.75 Expected On				1	1	0
32103018005922	AP4 .T452	Serial	0		35.75	0	35.75	35.75 Expected On				1	1	0
32103018004233	AP20 .N852	Serial	0		35.75	0	35.75	35.75 Expected On				1	1	0
32103018866581	AP30 .T43	Serial	0		35.75	0	35.75	35.75 Expected On				1	1	0
32103018869905	AP32 .D8	Serial	3.5		35.75	0	32.25	35.75 Expected On				1	1	0
32103014668549	AP63 .C6697	Serial	0		35.75	0	35.75	35.75 Expected On				1	1	1
32103005831569	Unable to Find Item	Serial	0		35.75	0	35.75	35.75				0	1	0
32103018567261	AS30 .A37	Serial	0		35.75	0	35.75	35.75 Expected On				1	1	2
32103003560756	Unable to Find Item	Serial	0		35.75	0	35.75	35.75				0	1	0
32103011418724	AS74.A1 T6	Serial	3.5		35.75	0	32.25	35.75 Expected On				1	1	2
32103018572335	Unable to Find Item	Mixed	3	13.25	35.75	19.5	13.25	35.75				0	0	0

Snapping the Selfie:

What is your methodology?

Known Factors- Shelf size, 35.75"

Framing Questions- Barcode, Types of Materials (Monographs, Serials, Mixed), Space Remaining, Length of serials

Sample Size- 1783 data points, 5%

Tolerances- Measured to the nearest 1/4"

Procedures- Using every 20th self, scan or input the barcode of the first item, mark whether items are serials/monograph, or mixed, and measure the space remaining empty space.

User Interface– Beta testing

People Power:

What is the size of the project?

Size of the collection- ≥37,000 shelves

Size of the team- Teams of two student assistants

Time for set up- 20-60 mins

Time for data collection- 24 hrs (Savings 608 hrs)

Time for inputting collecting data- 0 hrs (Savings 8-15 hours)

Time for data crunching- 20 hrs (Savings 0 hours)

Conclusion:

What does the data mean?

At what capacity is the collection? 108.3%, 5.96" remaining

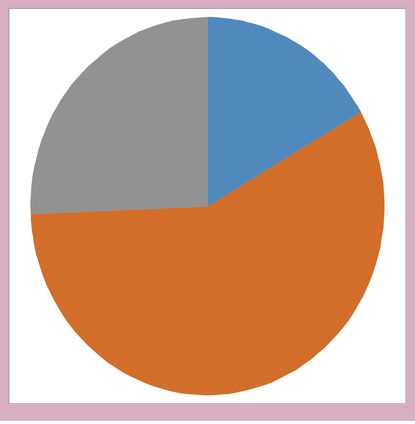
How has the collection grown or shrunk? +1.2"/shelf

Cataloging data for 24 items irretrievable with barcode (1.34% of GC)

How can you combine this with other data?

- Shelving plan without further construction
- Shelving plan for Post Arc Library

Results



Sum of Shelf Usage	Inches	Percent
Space Remaining	10628.49	16.67%
Monograph	36738.76	57.64%
Serials	16375.00	25.69%

Collection Size in Inches		Feet
Total	1115388.96	92949.08
Serial	343875	28656.25
Monograph	771513.75	64292.81

Unable to Find	
Total	24
Serial	13
Monograph	3
Mixed	8

Current Collection: Shelving Capacity Requirements

% of FULL	Shelf Cap.	# of Shel.	7 Sh/ Sec	# of Units	6 Sh/ Sec	# of Units	5 Sh/Sec	# of Units
128%	35.75	31200	4457	2229	5200	2600	6240	3120
106%	29.79	37443	5349	2675	6241	3120	7489	3744
100%	28	39835	5691	2845	6639	3320	7967	3984
89%	25	44616	6374	3187	7436	3718	8923	4462
79%	22	50699	7243	3621	8450	4225	10140	5070

Post Arc Library Shelving Plan

% Remain	7 Sh/Sec		6 Sh/Sec		5 Sh/Sec	
	22	25	22	25	22	25
60%	2173	1912	2535	2231	3042	2677
50%	1811	1593	2112	1859	2535	2231
40%	1449	1275	1690	1487	2028	1785
30%	1086	956	1267	1115	1521	1338
20%	724	637	845	744	1014	892